



PTO/SB/21 (08-03)

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/664,513	
	Filing Date	September 16, 2003	
	First Named Inventor	Marc K. HELLERSTEIN	
	Art Unit	1655	
	Examiner Name	P. Martin	
Total Number of Pages in This Submission	9 + 37 refs	Attorney Docket Number	416272003700

**ENCLOSURES (Check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate for fee processing - 2 pages)	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	<b>1. One copy of 16 Cited References</b>
<input checked="" type="checkbox"/> Information Disclosure Statement w/ Form PTO/SB/08a/b (6 pages)	<input type="checkbox"/> CD, Number of CD(s) _____	<b>2. Return Receipt Postcard</b>
<input type="checkbox"/> Certified Copy of Priority Document(s)	Remarks	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	MORRISON & FOERSTER LLP (Customer No. 20872) Michael R. Ward - 38,651
Signature	Michael R. Ward
Date	3/07/06

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 3/7/06 Signature: (Leah Kjellen)



<b>Effective on 12/08/2004.</b> <b>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</b> <b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		<b>Complete if Known</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	10/664,513
TOTAL AMOUNT OF PAYMENT (\$)		Filing Date	September 16, 2003
180.00		First Named Inventor	Marc K. HELLERSTEIN
		Examiner Name	P. Martin
		Art Unit	1655
		Attorney Docket No.	416272003700

<b>METHOD OF PAYMENT</b> (check all that apply)	
<input type="checkbox"/> Check	<input type="checkbox"/> Credit Card
<input type="checkbox"/> Money Order	<input type="checkbox"/> None
<input type="checkbox"/> Other (please identify):	
<input checked="" type="checkbox"/> Deposit Account	Deposit Account Number: 03-1952
	Deposit Account Name: Morrison & Foerster LLP
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below	<input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee
<input checked="" type="checkbox"/> Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17	<input checked="" type="checkbox"/> Credit any overpayments

<b>FEE CALCULATION</b>							
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
	<b>FILING FEES</b>		<b>SEARCH FEES</b>		<b>EXAMINATION FEES</b>		
		<u>Small Entity</u>		<u>Small Entity</u>		<u>Small Entity</u>	
<u>Application Type</u>	<u>Fee (\$)</u>	<u>Fee (\$)</u>	<u>Fee (\$)</u>	<u>Fee (\$)</u>	<u>Fee (\$)</u>	<u>Fee (\$)</u>	<u>Fees Paid (\$)</u>
Utility	300	150	500	250	200	100	0.00
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
							<u>Small Entity</u>
<u>Fee Description</u>							<u>Fee (\$)</u> <u>Fee (\$)</u>
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent							50 25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent							200 100
Multiple dependent claims							360 180
<u>Total Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>			
- 20 =	x	=	0.00	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>		
					0.00		
<u>Indep. Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>				
- 3 =	x	=	0.00				
<b>3. APPLICATION SIZE FEE</b>							
If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>			
- 100 =	/50	(round up to a whole number) x	=	0.00			
<b>4. OTHER FEE(S)</b>							
							<u>Fees Paid (\$)</u>
Non-English Specification, \$130 fee (no small entity discount)							0.00
Other: 1806 Submission of an Information Disclosure Statement							180.00

<b>SUBMITTED BY</b>			
Signature	<i>Michael R. Ward</i>	Registration No. (Attorney/Agent)	38,651
Name (Print/Type)	Michael R. Ward	Telephone	(415) 268-6237
		Date	3/07/06

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Dated: 3/7/06

Signature: (Leah Kjellen)

(Leah Kjellen)

Patent

Docket No. 416272003700

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Marc K. HELLERSTEIN

Examiner: P. Martin

Group Art Unit: 1655

Serial No.: 10/664,513

Filing Date: September 16, 2003

For: BIOCHEMICAL METHODS FOR  
MEASURING METABOLIC FITNESS  
OF TISSUES OR WHOLE ORGANISMS

**SUPPLEMENTAL INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.97 and § 1.98, Applicant submits for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of foreign documents and non-patent literature are submitted herewith. The Examiner is requested to make these documents of record.

This Supplemental Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.

03/13/2006 AKELECH1 00000033 031952 10664513

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- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.
- ☒ **After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.**
- ☐ A fee is required. A check in the amount of \_\_\_ is enclosed.
- ☒ **A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.**
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above; accordingly, no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a check in the amount of \_\_\_ is enclosed.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)

Applicant would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicant petitions for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **416272003700**.

Supplemental Information Disclosure Statement

Dated: 3/07/06

Respectfully submitted,

By Michael R. Ward

Michael R. Ward

Registration No.: 38,651

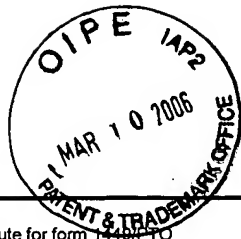
MORRISON & FOERSTER LLP

425 Market Street

San Francisco, California 94105-2482

Telephone: (415) 268-6237

Facsimile: (415) 268-7522



ALTERNATIVE TO PTO/SB/08a/b (07-05)

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/664,513	
			Filing Date	September 16, 2003	
			First Named Inventor	Marc K. HELLERSTEIN	
			Art Unit	1655	
			Examiner Name	P. Martin	
Sheet	1	of	3	Attorney Docket Number	416272003700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	1.	US-4,065,552	12-27-1977	Costa	
	2.	US-4,889,126	12-26-1989	Doddrell et al.	
	3.	US-4,940,658	07-10-1990	Allen et al.	
	4.	US-5,042,488	08-27-1991	Ackerman	
	5.	US-5,167,948	12-01-1992	Wenzel	
	6.	US-5,209,919	05-11-1993	Turteltaub et al.	
	7.	US-5,317,098	05-31-1994	Shizuya et al.	
	8.	US-5,354,662	10-11-1994	Stone et al.	
	9.	US-5,376,355	12-27-1994	Turteltaub et al.	
	10.	US-5,394,236	02-28-1995	Murnick	
	11.	US-5,506,147	04-09-1996	Kolhouse et al.	
	12.	US-5,597,548	01-28-1997	Sherry et al.	
	13.	US-5,783,445	07-21-1998	Murnick	
	14.	US-6,071,245	06-06-2000	Kohno et al.	
	15.	US-6,610,270	08-26-2003	Ajami	
	16.	US-6,625,547	09-23-2003	Korzekwa et al.	
	17.	US-6,764,817	07-20-2004	Schneider	
	18.	US-6,783,751	08-31-2004	Heumann	
	19.	US-6,872,575	03-29-2005	Regnier	
	20.	US-6,887,712	05-03-2005	Medford et al.	
	21.	US-2005/0003375	01-06-2005	Franza et al.	
	22.	US-2006/0008796	01-12-2006	Hellerstein	
	23.	US-2006/0029549	02-09-2006	Hellerstein	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	24.	EP-0826377	11-06-2002	Tokyo Gas Co., Ltd.		
	25.	WO-93/20800	10-28-1993	Kinnunen		
	26.	WO-95/13096	05-18-1995	Peptide Delivery Systems Pty. Ltd.		
	27.	WO-00/13025	03-09-2000	University of Washington		
	28.	WO-00/63683	10-26-2000	Target Discovery Inc.		
	29.	WO-01/84143	11-08-2001	Thermo Finnigan LLC		

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/664,513
				Filing Date	September 16, 2003
				First Named Inventor	Marc K. HELLERSTEIN
				Art Unit	1655
				Examiner Name	P. Martin
Sheet	2	of	3	Attorney Docket Number	416272003700

\*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>6</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	30.	Australian Patent Office Search Report mailed August 26, 2005, for Singapore patent application no. SG 200500571-5, filed July 25, 2003, 5 pages	
	31.	COLLINS, Michelle L. et al. (Jan. 31, 2003) "Measurement of mitochondrial DNA synthesis in vivo using a stable isotope-mass spectrometric technique," J Appl Physiol, 94: 2203-2211	
	32.	HECK, Steven D. et al. (April 1996) "Posttranslational amino acid epimerization: Enzyme-catalyzed isomerization of amino acid residues in peptide chains," Proc. Natl. Acad. Sci. USA, 93(9): 4036-4039	
	33.	International Search Report mailed August 1, 2005, for PCT application no. PCT/US2005/08265, filed March 11, 2005, 4 pages	
	34.	LUTTON, C. et al. (1990) "Critical analysis of the Use of 14C-acetate for Measuring In Vivo Rat Cholesterol Synthesis," Reprod Nutr Dev, 30: 71-84	
	35.	OUGUERRAM, K. et al. (Jan. 2002) "A New Labeling Approach Using Stable Isotopes to Study In Vivo Plasma Cholesterol Metabolism in Humans," Metabolism, 51(1): 5-11	
	36.	PATTERSON, Bruce W. et al. (Aug. 1997) "Measurement of Very Low Stable Isotope Enrichments by Gas Chromatography/Mass Spectrometry: Application to Measurement of Muscle Protein Synthesis," Metabolism, 46(8): 943-948	
	37.	ROOYACKERS, Olav E. et al. (Oct. 1996) "Tracer Kinetics Are of Limited Value to Measure In Vivo Protein Synthesis and Degradation Rates in Muscle of Anesthetized Rats," Metabolism, 45(10): 1279-1283	
	38.	SCHEIBNER, Jurgen et al. (1993) "Bile Acid Synthesis from Newly Synthesized Vs. Preformed Cholesterol Precursor Pools in the Rat," Hepatology, 17: 1095-1102	
	39.	Supplementary Partial European Search Report mailed August 17, 2005, for European patent application no. EP 03749756.7, filed September 15, 2003, 6 pages	

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/664,513
				Filing Date	September 16, 2003
				First Named Inventor	Marc K. HELLERSTEIN
				Art Unit	1655
				Examiner Name	P. Martin
				Attorney Docket Number	416272003700
Sheet	3	of	3		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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